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ABSTRACT

This study evaluated how college students reacted to an Early Alert notice about their grades. Undergraduate students in 19 specific courses were sent a notice if they were receiving a C minus or below at the 5-week point of the semester. The study investigated whether students who received the notice actually performed better than did control students. A group of 816 students received a notice that included their grade and suggestions for improving performance. Students' advisors also received copies of the notices. A month after receiving the notice, students completed a Web-based survey that asked what actions they took after receiving the notice and how they felt when they saw it. A total of 219 students completed the survey. Results indicated that early alert notices stimulated students to take action, generally such personal actions as studying more or getting better organized. Students were likely to talk with parents or peers regarding their notices. About 1 in 12 students did not engage in any of the actions identified on the survey, and 1 in 15 students withdrew from the course. Though notices motivated students to take action, they had little influence on improving academic performance. Appended are documents from the program. (SM)

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Assessing the Impact of the Early Alert Program

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Assessing the Impact of the Early Alert Program

Abstract

Undergraduate students need feedback concerning their performance in class if they are to improve. The Early Alert program was created as a pilot project whereby undergraduate students in specific courses were sent an "Early Alert" notice if they were receiving a C- or below at the five week point of the semester. The focus of this study was to identify how students reacted to the Early Alert notice and to substantiate whether students who received the EA notice actually performed better than a group of similar undergraduate students who served as a control group. Findings and implications are discussed.

Introduction

Undergraduate students need feedback concerning their performance in class if they are to improve (Chickering & Gamson, 1987, 1991). This becomes especially true for new students who may be doing poorly, as it suggests that adjustments or assistance may be necessary to enhance their standing by the end of the semester. At the present institution, undergraduate students do not receive mid-term grades. Further, there is no formal mechanism in place that would inform the student that they are doing poorly in a course. Consequently, the Early Alert (EA) program was created as a pilot project whereby undergraduate students in specific courses were sent an "Early Alert" notice if they were receiving a C- or below at the five week point of the semester. The focus of this study was to identify how students reacted to the EA notice and to substantiate whether students who received the EA notice actually performed better than a group of similar undergraduate students who served as a control group.

Background

In the last decade there have been significant efforts to enhance undergraduate teaching and learning at our colleges and universities. Undoubtedly, Chickering and Gamson's (1987, 1991) *Principles for Good Practice in Undergraduate Education* has provided some continuity for this effort. Accordingly, one common and well-supported recommendation suggests that faculty members should provide students with feedback on their performance during the semester so that students can take appropriate action, if necessary, to improve their standing. From a theoretical and practical perspective, this principle has wide support (see Sorcinelli, 1991). Moreover, recent research has indicated that strong normative support for providing undergraduate students feedback on their academic progress is supported among faculty members regardless of their institutional affiliation (Braxton, Eimers, and Bayer, 1996; Eimers, Braxton, and Bayer, 1998). Despite the logical support for this recommendation, however, empirical evidence that substantiates its effects on academic progress is not widespread.

Research Questions

Consequently, two research questions frame the focus of this inquiry:

1. What were students' reactions to receiving an EA notice? What behavior changes, if any, did they make?

2. Most importantly, how did their performance in the class compare to a similar group of students who were also doing poorly in the class but did not receive an EA notice?

Methodology

The context for the study was a public, research I university in the Midwest. Courses selected for the EA program were general education courses geared mainly toward freshmen students. In addition, the courses were purposefully selected because historically these courses included a relatively large percentage of students who did not pass the course. Once these courses were identified, the faculty members teaching these courses were asked if they would participate in the project; faculty members teaching 19 sections volunteered. Faculty members participating in the study also promised to provide some form of evaluation (and accompanying grade), such as a performance, project, quiz, examination, or paper, by the end of the fifth week. Consequently, during the sixth week of class all students who were receiving a C- or below in the participating classes were sent an EA notice from the registrar's office. The EA notice not only included the student's grade, but also various suggestions for improving performance (e.g., you may want to discuss this with your professor, seek help at the academic performance center, talk to your advisor, etc.). The student's advisor also received a copy of the notice (see Appendix for a copy of the Early Alert form). There were 816 students who received an EA notice.

Web-based Survey

The survey was developed by the University Council for Advisement and refined prior to being posted on the web. It was designed to elicit responses to two key concerns: 1) What actions, if any, were taken as a result of receiving the Early Alert notice? And 2) How did you feel when you saw the Early

Alert notice? For both questions a series of responses were provided for the respondent to check. In addition to some demographic questions, an open-ended question was provided: In your opinion, how do you think the Early Alert system could be improved? A copy of the Early Alert Survey is included in the Appendix.

Approximately four weeks after students had received their Early Alert notices, an e-mail letter was sent to the 816 participants. Included in the letter was the website address that included the Early Alert survey. The students were asked to go to the website, enter and verify their Student ID, and complete the survey. Five days later, a follow-up e-mail letter with the survey web-site location was again sent to all non-respondents. A final e-mail message was sent about ten days after the first notification to the remaining non-respondents. In this final case, the survey was embedded in the e-mail message (the website address was not included in the e-mail) and students were asked to complete the survey and return the message via e-mail.

Response Rate and Bias

The response rate for the survey was 29.5% (241/816). Although this response rate is slightly lower than what is typically found in similar studies, it is quite positive considering the circumstances. First, this survey was administered in the two weeks before Thanksgiving break—an extremely busy time for students. Second, this is a sensitive subject, particularly for first-time freshmen who represented the majority of the subjects. Third, it is possible that the response rate is higher than 29.5% because it is difficult to determine whether everyone received and opened the e-mail message. That is, some students may not use e-mail or may use a different e-mail account than the one assigned by the University.

To check for response bias, respondents were compared to non-respondents on five characteristics: gender, student level, ethnicity, course enrolled, and Early Alert grade. Females and African-Americans were significantly ($p < .01$) more likely to respond to the survey than males and other

ethnic groups, respectively. Although there were no statistically significant differences in how males and females responded to several items on the survey, there were some differences based on ethnicity. African-American were more likely to talk to peers and family about their Early Alert notices ($p < .01$) and were also more likely to be "concerned about losing their scholarship aid" ($p < .01$). Thus, responses to these items may be slightly over-represented. In terms of the differences between those who responded to the web survey in contrast to the e-mail survey, there were no statistically significant differences.

Results

There were 241 students who responded to the survey. Of these, 219 remembered receiving the Early Alert notice and consequently are the focus of the study. The first question asked respondents: "What actions did you take as a results of receiving the Early Alert Report?" The results of this question are noted in Table 1.

Students were most likely to take personal actions such as studying more or getting themselves better organized. They also were likely to talk with parents or peers regarding their Early Alert notice. About one in twelve stated that they did not engage in any of the actions that were identified and one in fifteen said they withdrew from the course.

Table 1. Percentage of Respondents Who took the Following Action as a Result of the Early Alert Notice (N=219)

Rank	Item	Action (percentage)
1	A	Study More (85.6%)
2	B	Make yourself better organized (53.4%)
3	C	Talk to Parent/Guardian (47.0%)
4	D	Talk to Peers (44.7%)
5	E	Attend scheduled review and/or study sessions (37.4%)
6	F	Participate in a study group of peers (28.3%)
7	G	Contact Advisor/Course instructor/coordinator (27.9%)
8	H	Party less on School nights (21.4%)
9	I	Party less overall (13.7%)
10	J	None of the above (8.2%)
11	K	Cut back hours of employment (6.8%)
11	L	Withdraw from the Course (6.8%)
13	M	Contact Learning Center (4.1%)
14	N	Contact Academic Retention Services (3.7%)
14	O	Hire a tutor (3.7%)
16	P	Contact Counseling Services (2.3%)
17	Q	Contact Dean's Office (1.8%)
18	R	Contact Disability Services (1.3%)
19	S	Contact Career Counseling (0.9%)
19	T	Contact Total Person Program (0.9%)
19	U	Enroll in Study Skills Course (0.9%)
22	V	Writing Intensive Tutorial Service (0.0%)

The twenty-two items in Table 1 were grouped into six composite variables that represented actions that could be considered to be similar in nature. For example, the items "study more," "make yourself better organized," "attend scheduled review and/or study sessions," "participate in study groups," and "enroll in a study skills course" were combined to form the composite variable, "Take Personal Action." The six composite actions, in order of frequency, are noted in Table 2. As a result of the Early Alert notice, most students took some "personal action" (e.g., studied more), followed by "talking to peers or parents" and then "consulting a professional" (e.g., contacting the professor, their advisor, the learning center, etc.). Interestingly, only about a third of the students contacted their instructor, advisor, teaching assistant, or a campus service (e.g., learning center).

Because female students were more likely to respond to the survey, their responses were compared to those of male respondents. Likewise, because African-American students were more likely to respond than other ethnic groups, the responses of different ethnic groups were compared. Using chi-square, the composite actions from Table 2 were used to test for differences. For gender, there were no statistically significant differences between female and male respondents concerning any of the six composite variables identified in Table 2. For ethnicity, African-American students were significantly more likely to "talk with peers or parents" ($p < .01$) than respondents of other ethnic groups. This was the only composite action where a statistically significant difference was noted with the variable ethnicity.

Table 2. Percentage of Respondents Who Took the Following Composite Actions as a Result of the Early Alert Notice (N=219)

Rank	Items	Composite Action (percentage)
1	A,B,E,F,U	Take personal action (87.7%)
2	C,D	Talk with peers or parents (60.3%)
3	G,M,N,O,P,Q,R,S,Y,V	Consult a professional (35.2%)
4	H,I,K	Reduce partying/hours working (31.1%)
5	J	Nothing (8.2%)
6	L	Withdraw from course (6.8%)

Table 3 identifies the percentage of respondents who had specific reactions to the Early Alert notice. For the majority of respondents, it was a "wake-up call for them to do something." In addition, several respondents thought they might lose their scholarship or be dismissed from class because of their poor performance in the course. Just over 6% "didn't care" and another 5% was "angered that someone was looking over their shoulder."

Table 3. Percentage of Respondents Who Had the following Reaction to the Early Alert Notice (N=219)

Rank	Reaction (percentage)
1	It was a "Wake-Up" call for me to do something (62.1%)
2	Scared that I might lose my scholarship or other financial assistance (22.3%)
2	Scared that I might be dismissed from the University (22.3%)
4	Shocked because I thought I was doing fine (21.0%)
5	Relieved that someone was paying attention (17.3%)
6	Worried that my parent/guardian might pull me out of the University (12.8%)
7	Didn't care (6.4%)
8	Angered by someone looking over my shoulder (5.0%)

Did various groups address the items in Table 3 differently? There were no statistically significant differences for gender. For student level, however, freshmen respondents were significantly more likely to say that the Early Alert notice was a "wake-up call" than those students who where sophomores ($p <$ .01). In addition, African-Americans were significantly more likely to identify that they were "scared that they might lose their financial aid" than the respondents of other ethnic groups ($p < .01$).

Qualitative Responses

One open-ended item was included on the survey: "In your opinion, how do your think the Early Alert system could be improved?" There were 168 comments regarding this item so just over 75% of the respondents addressed the question in some manner. Although respondents felt that there were several ways in which the Early Alert program could be improved, in general, the majority were very positive about the Early Alert program. Respondents felt that it served as a real "wake-up" call and provided some impetus for action. At the same time, a small minority of respondents felt that the University was looking over their shoulder and they were alarmed that the University did not think that they could take care of themselves.

Control Group and the Early Alert Group

In four of the nineteen sections, students who received a C- or below at the five-week point were randomly assigned to two groups. The first group (EA Group) received the EA notice. The second group served as the Control Group and did not receive EA notices. At the end of the semester, final grades were compared between the two groups. The four sections included three sections of general biology and one section of microeconomics.

Chi-square analyses and t tests were used to analyze potential differences between the Control Group and EA Group. Chi-square analysis noted no statistically significant differences between the two groups in terms of ethnicity (p =.29), gender (p =.88), student level (p =.99), or distribution of grades at the five-week point (p =.37). Furthermore, t tests noted no statistically significant differences between the two groups when high school rank (p =.64) or ACT (p =.96) were compared. In summary, the two groups were literally alike. Because we were most concerned with whether a student could raise his or her final grade to a C or better (the University's definition of "success"), final grades were separated into two groups (C or higher = successful; C- or lower = unsuccessful). Of the 118 in the control group, 57 or 48% were successful. Of the 139 in the EA group, 44 or 32% were successful (see Table 6). The chi-square analysis was statistically significant ($X^2 = 7.4$, $df = 1$, $p < .01$).

Table 4. Mean Scores of Control Group and Early Alert Group

Control Group (N=118)	**Mean**	**S.D.**
Five week grade (11-point scale)	2.0	1.5
High School rank	64.1	19.3
ACT	22.6	2.9
Early Alert Group (N=139)		
Five week grade (11-point scale)	2.0	1.5
High School rank	65.3	20.3
ACT	22.7	2.9

Table 5. Comparison Information: The Control Group and Early Alert Group

	Control Group	EA Group
Female	56.8%	54.0%
Caucasian	79.7%	84.2%
African-American	8.5%	9.4%
Freshmen	72.9%	71.9%
Five-week Grade (greater than D-)	69.4%	64.0%

Table 6. Success Rate of Control Group and Early Alert Group

	Control Group	EA Group
Success Rate	48.3% (57/118)	31.6% (44/139)
Chi-square: ($X^2 = 7.4$, $df = 1$, $p < .01$)		

Limitations

The limitations of this study include the following. First, faculty members who participated in the study were volunteers. Second, in some cases where the student had not updated his or her address at college, the Early Alert notices were sent to the student's home address. Consequently, we cannot determine how many students actually received the Early Alert notice. Third, we anticipated conducting several focus groups with some of the students who received an Early Alert notice. Group sessions were even scheduled in early December. Due to the poor timing during the semester, however, we only had a handful of students who attended the focus group sessions.

Discussion and Implications

First, the EA notices were effective in stimulating "action" among students who responded. The notices apparently did get students' attention and garnered an action intended to improve performance. Based on the relatively few who said they "didn't care," the notice did invoke a reaction that suggested

students were concerned about their performance. Unfortunately, however, the actions students engaged in because of the EA notice were not necessarily the actions that lead to improved academic performance (only 1 in 3 improved). Further, and especially because many of these students were freshmen, the EA may have scared students to the point that they panicked and were unable to improve their standing. This may be a particularly important concern. Students who did poorly in these courses had an average ACT score of 22.6 and a high school rank of 64.7%. The average ACT score for incoming freshmen in the fall of 1998 was 25.7. Thus, reminding relatively poorer students that they are not only in academic trouble in this course but also that they should seek academic assistance may have damaged an academic ego that was already somewhat fragile.

Second, the findings of this study contribute to the literature by suggesting that a single, formal notification that informs the student that he or she is doing poorly may not be enough. That is, much of the literature recommends that frequent and regular feedback on academic performance should be encouraged. Consequently, although the EA program may be a move in the right direction, one may find that multiple progress reports throughout the semester are necessary to have a positive effect on performance. At the same time, because the Control group was more likely to succeed than the EA group, efforts need to taken to ensure that the EA notices are not hindering the performance of students in some way.

Third, we were surprised to find that the EA group did not do as well or even better than the Control group. Clearly there are limitations to this study and our findings will need to be substantiated. However, implementing the EA program requires significant levels of institutional resources and cooperation. To be effective, a process like the EA program whereby a single, formal feedback process channeled through the registrar's office will require change. Thus, we are currently exploring ways that technology can aid faculty members in their efforts to share academic progress with students. Workshops presently teach faculty how to use spreadsheet software to communicate academic progress to several students that are enrolled in their courses. That is, we feel the EA program might be a move in the right

direction but that it needs to be less formal, more frequent, less intimidating, and more closely linked to the faculty member who teaches the class.

Conclusion

This study reported student reactions to the Early Alert program and examined whether students who received an EA notice actually performed better than a similar control group. Although students reported that the EA notice helped get them back on track, it apparently had little influence on improving their academic performance. The evidence suggests that grade deficiency reminders may be insufficient to have a real impact on academic performance and more frequent reminders may be a viable alternative. Furthermore, this study raises the issue as to whether deficiency reminders used with freshmen students in some way negatively affects their ability to improve their standing in class.

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Appendix: Early Alert Study

University Council on Advisement Survey Results for Early Alert, Fall 1998

1. Do you remember receiving an Early Alert Grade Report in the middle of this semester informing you that you had a C- or below at the mid point of the semester?

Yes
No

2. If so, what actions did you take as a result of receiving the Early Alert Report? (Check all that apply)

Study More
Make yourself better organized
Talk to Parent/Guardian
Talk to Peers
Attend scheduled review and/or study sessions
Participate in a study group of peers
Contact Advisor and/or Course instructor/coordinator
Party less on School nights
Party less overall
None of the above
Cut back hours of employment
Withdraw from the Course
Contact Learning Center
Contact Academic Retention Services
Hire a tutor
Contact Counseling Services
Contact Dean's Office
Contact Disability Services
Contact Career Counseling
Contact Total Person Program
Enroll in Study Skills Course
Writing Intensive Tutorial Service

3. How did you feel when you saw the Early Alert grade report? (Check all that apply)

It was a "Wake-Up" call for me to do something
Scared that I might lose my scholarship or other financial assistance
Scared that I might be dismissed from the University
Shocked because I thought I was doing fine
Relieved that someone was paying attention
Worried that my parent/guardian might pull me out of the University
Didn't care
Angered by someone looking over my shoulder

4. Where are you living this semester?

Residence Halls
Off Campus
Fraternity/Sorority
Parent/Guardian
Other

5. In your opinion, how do you think the Early Alert system could be improved?

Early Alert Notice (Example)

TO: Name of Student

GRADE: C-

COURSE: General Biology

The grade shown on the Early Alert Report is based on an assessment of progress in a course at the end of the Fifth Week of classes and should serve as a warning that performance needs to improved in order to complete the course with a C or above. This report is only an alert.

This grade report is based on the Early Alert Pilot Program for selected Fall, 1998 courses and is not campus-wide. Students with less than 60 hours and enrolled in courses which are included in the pilot program will receive the Early Alert Grade Report only if their performance in the course is below a C (2.0). Students taking courses which are not in the pilot program who do not receive the Early Alert Grade Report should not consider the absence of a report as an indication of their performance in this or any other course in which they are enrolled.

The following are some resource which students may seek (as appropriate) for assistance in improving their performance in their courses:

(Note: If a student is unsure who is their advisor, they should contact their Dean's Office.)

Academic Advisor
Faculty Advisor
Dean's Office
Course Instructor/Coordinator
Learning Center, Address, Phone number
Counseling Services, Address, Phone number
Disability Services, Address, Phone number
Career Counseling, Address, Phone number
Academic Retention Services, Address, Phone number
Writing Intensive Tutorial Services, Address, Phone number
Total Person Program (Student Athletes) Address, Phone number

Email Cover Letter #1

To: Name of Student

From: The University Council on Advisement

The University Council on Advisement was created to improve undergraduate academic advising at UU. As part of this on-going effort, you have been selected to provide some feedback that will help us to enhance academic advising at the University.

To make the process of completing the survey as easy as possible for you, we have developed a brief web-based survey that takes less than five minutes to complete. This survey is located at: [survey website address]. It would be greatly appreciated if you could complete the survey and submit it by Thursday, November 12th.

Please be assured that your responses will be treated with complete confidentiality and you will never be identified individually on any report prepared from this survey.

Thank you in advance for providing us with information that will help us improve undergraduate advising at the University of U.

Email Cover Letter #2
(sent to non-respondents only)

To: Name of Student

From: The University Council on Advisement

Earlier this week the University Council asked you to complete a brief web-based survey concerning advising at UU. If you have recently responded to the survey, then please accept our sincere thanks. If not, we encourage you to do so now.

The University Council is interested in your opinions regarding academic advising to help guide our efforts to improve advising for all undergraduate students. This survey will take you less than five minutes to respond and is located at: [survey website address]. It would be greatly appreciated if you could complete the survey and submit it before Monday, November 16th.

Please be assured that your responses will be treated with complete confidentiality and you will never be identified individually on any report prepared from this survey.

Thank you in advance for providing us with information that will help us improve undergraduate advising at the University of U.

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